



Attorney Docket: 622ZI/48609CP
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: BERND MAISENHOELDER ET AL.
Serial No.: 09/916,114 Group Art Unit:
Filed: JULY 27, 2001 Examiner:
Title: WAVE GUIDE PLATE PROCESS OF MANUFACTURING SAME
AS WELL AS MICROPLATE

PRELIMINARY AMENDMENT

Box Non-Fee Amendment
Commissioner for Patents
Washington, D.C. 20231

Sir:

Please enter the following amendments to the specification, claims and
abstract prior to the examination of the application.

IN THE SPECIFICATION:

Submitted herewith is a substitute specification.

IN THE ABSTRACT:

Please substitute the new Abstract of the Disclosure submitted herewith on a
separate page for the original Abstract presently in the application.

09/916,114 - 11/01
T06T144

REMARKS

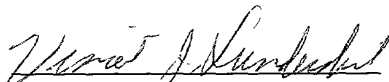
Entry of the amendments to the specification and abstract before examination of the application is respectfully requested.

If there are any questions regarding this Preliminary Amendment or this application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

It is respectfully requested that, if necessary to effect a timely response, this paper be considered as a Petition for an Extension of Time sufficient to effect a timely response and shortages in other fees, be charged, or any overpayment in fees be credited, to the Account of Evenson, McKeown, Edwards & Lenahan, P.L.L.C., Deposit Account No. 05-1323 (Docket No. 622ZI/48609CP).

Respectfully submitted,

Date: 11/19/01


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ABSTRACT OF THE DISCLOSURE

A waveguide plate and a process for making the waveguide plate with a plate-like glass substrate (1), carrying a waveguiding layer (2), with at least one coupling grating on the surface carrying said waveguiding layer (2), which coupling grating is formed as a grating of lines with a period between 150 nm and 1000 nm, the extension of said grating being at least 5 cm with lines parallel to one another, wherein the coupling angle (θ) varies by not more than 0.1°/cm along a line of said grating and wherein the absolute value of the deviation of the coupling angle (θ) on said waveguide plate, from a predefined desired value, does not exceed 0.5°. The deviation from the average value of the coupling angle does not exceed 0.3°, preferably not 0.15° on the whole waveguide plate. The waveguide plate is suitable as part of a sensor platform and of an arrangement of sample compartments for chemo-and bioanalytical investigations in order to produce a coupling grating formed as a line grating with a grating period between 100 nm and 2500 nm